

Applicant : Gregg L. Shetty
Serial No. : 10/688,668
Filed : October 17, 2003
Page : 3 of 21

Attorney's Docket No.: P-US-TN-3305

Amendments to the Drawings:

Please add the attached new sheet of drawings showing FIG. 1A to the drawings. No new matter has been added.

REMARKS

Claims 1-5 and 66-79 are pending with claims 1, 66, 67, and 72-79 being independent. Claim 1 has been amended and claims 70-79 have been added. No new matter has been added. For at least the following reasons, Applicants respectfully request reconsideration and allowance of this application.

Restriction Requirement and New Claims 72-79

This application was previously subject to a restriction requirement, mailed December 29, 2004, which required election among the following patentably distinct inventions, as follows:

This application contains claims directed to the following patentably distinct species of the claimed invention:

- I. A saw with a switch electrically connected to a motor;
- II. A saw with a pump removably disposed on a base;
- III. A saw with one of the frame assembly and the supporting assembly having a first and second post, and the other of the frame assembly and the support assembly having a first and second hole;
- IV. A saw with an electrical outlet disposed on a support assembly;
- V. A saw with a table that has at least one insert that is cuttable by a cutting wheel;
- VI. A saw with a table that has an element movably attached to the table for indicating a cutting path of a cutting wheel;
- VII. A saw with a table that has an insert with first and second substantially vertical walls;
- VIII. A saw with a table that has a groove;
- IX. A saw with a pan attached to a table;
- X. A saw with a saw assembly being pivotable about a horizontal axis;
- XI. A saw having a saw assembly being pivotable about a bevel axis;
- XII. A saw with a rotatable guard;

XIII. A saw with a second rail disposed adjacent a first rail and a first roller assembly connected to the table;

XIV. A saw with a fluid delivery system having a first pivotable nozzle with a hole;

XV. A saw with a guard and a fluid delivery system having a first flexible nozzle;

XVI. A saw with a guard and a fluid delivery system assembly with a ribbed nozzle;

XVII. A saw with a guard having a least one rib;

XVIII. A saw with a motor housing having an inlet, a labyrinth path, and a filter;

XIX. A saw with a guard having a flexible flap and at least one rib;

XX. A saw with a fence assembly.

In response to the December 29, 2004 restriction requirement, Applicant elected to prosecute Group I (claims 1-5) in this application, and cancelled the remaining claims. During prosecution of this application, Applicants added now pending claims 66-71, which are directed to the same invention originally elected.

In the present Amendment, Applicants have added new independent claims 72-79, which are directed to additional, patentably distinct inventions disclosed in the originally filed specification, but not claimed in the originally filed application. Accordingly, Applicants respectfully suggest restriction between Group I (claims 1-5 and 66-71), non-elected Groups II through XX (which have been cancelled from this application), and the following additional patentably distinct groups:

Group XXI (claim 72) directed to a saw with an extension pan removably coupled to the front end or the back end of at least one of the main drain pan and the base.

Group XXII (claims 73 and 74) directed to a saw with a table having first and second bearings, where a position of the second bearing relative to the table is adjustable to allow the first bearing and the second bearing to be out of alignment and located at different distances from the rail.

Group XXIII (claims 75 and 76) directed to a saw with a rail attached to the base in a manner permitting adjustment of the angular position of the rail, and a method for adjusting the angular orientation of such a rail.

Group XXIV (claims 77 and 78) directed to a saw with a stand attachable to the base of the saw.

Group XXV (claim 79) directed to a saw with a table that includes a lip extending below the table to at least partially cover the rail to inhibit fluid from entering the rail.

The above-suggested groups and the groups identified in the December 29, 2004 restriction requirement are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct because they do not overlap in scope, are not obvious variants, and each are separately usable from each of the other subcombinations and has separate utility. In addition, or in the alternative, the above-suggested groups and the groups identified in the December 29, 2004 Office Action contain claims to patentably distinct species of the invention. There is no generic or linking claim for these species.

If the Examiner restricts the claims as suggested above, Applicants provisionally elect, without traverse, to continue prosecution of Group I (claims 1-5 and 66-71), and to cancel non-elected claims 72-79 (Groups XXI through XXV).

Drawings

The drawings have been objected to on the basis that a better depiction of the stationary switch is required. For at least the following reasons, Applicants respectfully request withdrawal of this objection. The depictions of the switch 92 in Figures 1 and 13A clearly show the switch 92 and surrounding structure that allow the switch 92 to remain stationary on the arm body 61 when the motor housing 78 is beveled. The specification, at least at paragraph 00133, makes this feature clear, as well. Moreover, it is surprising that the Examiner has first raised this as a concern in this, the eighth, substantive Office Action in this application. Thus, Applicants respectfully request withdrawal of this objection.

In case the Examiner maintains this objection, and in the interests of expediting prosecution, Applicants submit herewith new Figure 1A, which shows the tile saw of Fig. 1 with

the motor assembly 78 beveled relative to the arm body 61. As can be seen, the switch 92 is positioned on the arm body 61, and not on the motor assembly 78, so that the switch remains stationary while the motor assembly 78 bevels. No new matter has been added. Support for this new Fig. 1A can be found throughout the specification and figures, for example, at paragraphs 00122-00127 and 00133 and the figures described therein.

Rejection of Claims 1-4 Under 35 U.S.C. § 103(a)

Claims 1-4 have been rejected under 35 U.S.C. § 103(a) as being obvious over Lee (U.S. Pat. No. 6,272,961) in view of O'Banion (U.S. Pat. App. Pub. No. 2001/0000856), Tebbe (US Pat. No. 6,119,677), and Gilbert (U.S. Pat. No. 3,298,097). For at least the following reasons Applicants respectfully request withdrawal of this rejection.

To establish a prima facie case of obviousness, the Examiner must consider and evaluate four factors: (a) the level of ordinary skill in the pertinent art; (b) the scope and content of the prior art; (c) the differences between the prior art and the claims; and (d) secondary considerations, such as commercial success, long felt need, and failure of others. KSR Int'l Co. v. Teleflex, Inc., No. 04-1350, slip op. at 2 (U.S. Apr. 30, 2007) (citing Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966)); see also M.P.E.P. § 2141. KSR did not disturb the well-established principle that, for a prima facie case of obviousness, each and every limitation of the claim must be taught or suggested by the cited references. M.P.E.P. § 2143.03 (citing In re Royka, 490 F.2d 981 (C.C.P.A. 1974)). KSR also reiterates that "when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious." KSR, slip. op. at 12. Furthermore, under KSR, the Office Action must "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] references." Memo from Margaret A. Focarino to Technology Center Directors (May 3, 2007) (quoting KSR, slip. op. at 14-15).

There is no prima facie case of obviousness against independent claim 1 as amended. Independent claim 1 relates to a beveling head saw with "a switch electrically connected to the motor assembly and disposed on the support assembly above the table and proximate to the motor assembly so that, when the motor assembly is pivoted about the pivot axis, the support

assembly and the switch remain stationary relative to the pivotal movement of the motor assembly.” Lee, the base reference, describes a beveling head saw, but, as acknowledged on page 3 of the Office Action, fails to describe a switch that remains stationary, as recited in claim 1. Rather, the switch of Lee is on the motor 41, not the support, so that the switch moves together with the motor 41 when it bevels, rather than remaining stationary.

For a teaching of a stationary switch, the Office Action instead relies upon the teachings of O'Banion, Tebbe, and Gilbert. However, as discussed in more detail below, these references do not disclose a stationary switch that is also above the table and proximate the motor, teach away from the claimed switch location, and/or fail to provide a reason that one of ordinary skill in the art would combine these references with Lee to meet these missing claim features.

O'Banion describes a miter saw workstation 100 that includes a base 11, a rotatable table 12, and a pivot arm 15 that pivotally supports a miter saw unit 22 having a blade 17 and motor 19. The miter saw includes a controller 200 with buttons 202B (which the Examiner equates to the claimed switch) on a console 202 below the base. The buttons 202B are used to control various servo motors on the saw. Even accepting for the sake of argument the Examiner's characterizations of O'Banion, that reference does not cure the deficiencies of Lee because O'Banion fails to show the buttons 202B being above the table or proximate the motor 19. Moreover, there is no reason that one of ordinary skill in the art would look to O'Banion to modify Lee because the buttons of O'Banion are used for controlling servo motors, not as an on/off power switch like the switch of Lee. Thus, Lee and O'Banion cannot form a prima facie case of obviousness against claim 1.

Tebbe describes an apparatus for clamping and cutting metal cast trees and includes a main frame 11 that supports a saw assembly 17 and a clamp 36 that are laterally spaced from one another. The saw assembly 17 includes a motor 22 and a blade 27. The clamp 36 includes a jack screw 30 driven by a drive motor 33. Disposed on the clamp 36 is a control panel 74 with actuator buttons 75 (which the Examiner equates to the claimed switch) for controlling the saw assembly 17. Even accepting for the sake of argument the Examiner's characterizations of Tebbe, that reference does not cure the deficiencies of Lee because Lee fails to show the buttons

75 proximate to the saw assembly 17. Rather, the buttons 75 are positioned on the clamp assembly 36. Moreover, Tebbe teaches away from modifying Lee to have a stationary switch proximate the motor assembly because Tebbe teaches that the buttons 75 are "located for easy access by an operator adjacent the U-shaped handle 73" of the clamp assembly 36. In addition, there is no reason that one of ordinary skill in the art would look to Tebbe to modify Lee because the buttons 75 of Tebbe are positioned away from the saw assembly 17. Thus, Lee and Tebbe cannot form a prima facie case of obviousness against claim 1.

Gilbert describes a sawing machine 10 having a table 12 and three saw assemblies 62, 64, and 84 mounted above the table. Above the saw assemblies 62, 64, and 84, and mounted on cantilevered rails 38 and 40, are switches 46 and 48 (which the Examiner equates to the claimed switch) that control operation of the saws in saw assemblies 62, 64, and 84. Even accepting for the sake of argument the Examiner's characterizations of Gilbert, that reference does not cure the deficiencies of Lee because Gilbert fails to show the switches 46 and 48 proximate to the saw assemblies 62, 64, and 84. Rather, the switches 46 and 48 are disposed on rails 38 and 40 away from the saw assemblies. Indeed, Gilbert teaches away from the proposed modification because the purposed of rails 38 and 40 appears to be to mount the switches 46 and 48 at a distance from the saw assemblies 62, 64, and 84. Moreover, there is no reason that one of ordinary skill in the art would look to Gilbert to modify Lee because the buttons of Gilbert are positioned away from the saw assemblies. Thus, Lee and Gilbert cannot form a prima facie case of obviousness against claim 1.

The Office Action also relies upon In re Japitkse, 86 USPQ 70 (CCPA 1950), to argue that "the location of the switch would have been an obvious matter of choice dependent on the suitability of that location for whatever desired reason, such as dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product." However, in In re Japitkse, the claims related to the position of a switch on a hydraulic press were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device. In contrast, moving the switch of Lee from a moveable

location to a stationary location proximate the saw assembly substantially alters the operation of the saw by enabling easier location of the switch by the user while beveling the head of the saw.

In addition, “[t]he mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device.” M.P.E.P. § 2144.04(IV)(C) (quoting Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984)). As explained above, the prior art cited in the Office Action does not provide any such reason for making the proposed modification to Lee. Therefore, the legal precedent of In re Japitske is not applicable to this application.

Moreover, it is improper to base an obviousness rejection on the modification of a reference by an obvious design choice when the element being modified is the same element that forms the basis for novelty. Ex parte Cady, 148 U.S.P.Q. 162 (Bd. Pat. App. & Int. 1965). In Cady, the Examiner rejected as obvious a claim to a frying pan handle with a particular type of hook, on the basis that modifying the prior art to include such a hook would be a “common expedient.” Cady, 148 U.S.P.Q. at 162. The Board held that such a rejection is improper when the element relied upon as the common expedient is “the exact point at which patentable novelty is argued.” Id. Similarly, the Office Action improperly relies on obvious design choice for the location of the switch, when the location of the switch as stationary is the basis of novelty for the claim. Accordingly, the reliance on Japitske and obvious design choice is improper.

For at least the foregoing reasons, the Office Action fails to satisfy the requirement for a prima facie case of obviousness in light of any combination of Lee, O'Banion, Tebbe, and Gilbert.

Even if the Office Action establishes a prima facie case of obviousness, objective evidence related to the criticality of the switch location – as demonstrated by the Affidavit of Stuart Wright Under 37 C.F.R. § 1.132 that was submitted with Applicants November 15, 2006 Reply (“Affidavit”) – rebuts this prima facie case of obviousness. “Affidavits or declarations, when timely presented, containing evidence of criticality or unexpected results, commercial

success, long-felt but unsolved needs, failure of others, skepticism of experts, etc., must be considered by the examiner in determining the issue of obviousness of claims for patentability under 35 U.S.C. 103.” M.P.E.P. § 716.01(a).¹ “If rebuttal evidence of adequate weight is produced, the holding of prima facie obviousness, being but a legal inference from previously uncontradicted evidence, is dissipated.” In re Piasecki, 745 F.2d 1468 (Fed. Cir. 1984). The Affidavit provides sufficient objective evidence of the criticality of the switch location to rebut the prima facie case of obviousness.

The location of the claimed power switch is critical to the ergonomics and ease of use of the claimed saw. The power switch of the claimed saw is positioned on the support assembly (proximate the saw blade) so that when the motor assembly is pivoted about its pivot axis, the switch remains stationary (Affidavit at ¶ 6). The position of the power switch was carefully chosen after months of significant research into the positioning of the power switch, as follows (Id.). The design team for the claimed saw reviewed the positioning of switches on prior beveling head saws, of which there are two types (Id. at ¶ 7). In the overhead beveling head tile saws (an example of which is depicted in Exhibit A attached to the Affidavit), the power switch is located on the motor assembly, so that the switch pivots with the motor assembly (Id.). In the angle grinder-based tile saws (an example of which is depicted in Exhibit B attached to the Affidavit), the power switch is on a moving portion of the grinder, so that the power switch moves with the grinder body (Id.). The design team discovered that operation of the switches on these prior tile saws is difficult and cumbersome for the user (Id.). The moving switch on these tile saws often is difficult to locate as the tile saw is being operated, and the user often experiences fatigue and frustration in locating the switch on the tile saw (Id.).

The design team then considered and researched positioning the power switch on a variety of alternative positions on a new saw. (Id. at ¶ 8). As a result of extensive research, the design team determined that positioning the power switch on the support assembly so that the switch remains stationary relative to the pivoting motor assembly is optimal (Id.). Such positioning of the power switch is critical to the ergonomics and ease of use of the tile saw (Id.).

¹ In Applicant's previous response, this citation was inadvertently typed as M.P.E.P. § 706.01(a).

For example, this positioning of the power switch enhances the ability of the user to locate the switch during operation of the tile saw (Id.). This enables the user to both turn on and shut off the tile saw quickly and easily without having to adjust the position of other portions of the tile saw (Id.). In addition, this positioning of the tile saw switch reduces user fatigue and frustration when using the tile saw (Id.).

Placing the power switch on the support assembly so that it remained stationary required the design team to overcome several technical and financial challenges (Id. at ¶ 9). The switch had to be wired in such a manner that the switch would remain stationary in a position further removed from the motor than in previous tile saws (Id.). This involved additional cost considerations, which needed to be reduced in order to price the tile saw in such a way to be attractive to the end user (Id.).

The stationary switch of this application has been included as a feature on the DeWalt D24000 10" Wet Tile Saw (photographs of which were attached as Exhibit C to the Affidavit) (Id. at ¶ 10). As shown in Exhibit C, the tile saw switch remains stationary, even when the head bevels (Id.). The design team has found that this feature provides significant advantages in the ergonomics and ease of use of the tile saw, including allowing the user to locate the switch during operation of the tile saw, enabling the user to both turn on and shut off the tile saw quickly and easily without having to adjust the position of other portions of the tile saw, and reducing user fatigue and frustration when using the tile saw (Id.).

The Office Action fails to address the secondary evidence of non-obviousness, the consideration of which is mandated by KSR, slip op. at 2 (citing Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966)). Thus, for at least the foregoing reasons, the Affidavit sets forth objective evidence as to the criticality of the switch position sufficient to rebut the purported prima facie case of obviousness set forth in the Office Action.

For all of the foregoing reasons, the Office Action has not established a prima facie case of obviousness as to claim 1. Moreover, even if the Office Action has established a prima facie case of obviousness, there is objective evidence to rebut the prima facie case. Therefore, claim

1, and its dependent claims 2-4, are patentable over Lee, O'Banion, Tebbe, Gilbert, or any combination thereof.

Rejection of Claim 5 Under 35 U.S.C. § 103(a)

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being obvious over Lee in view of O'Banion, Tebbe, and Gilbert, as applied to claim 1 above, and further in view of Klingens (U.S. Pat. No. 2,691,398). Claim 5 depends from claim 1 and is allowable for at least the reasons discussed above with respect to claim 1. Moreover, Klingens does not remedy the deficiencies of Lee discussed above with respect to claim 1. In particular, Klingens does not describe or suggest, nor is it relied upon to show, at least the claimed "switch electrically connected to the motor assembly and disposed on the support assembly above the table and proximate the motor assembly so that, when the motor assembly is pivoted about the pivot axis, the switch remains stationary." For at least these reasons, claim 5 is patentable over Lee and Klingens.

Allowable Subject Matter

Applicants appreciate the indication of allowable subject matter in claims 66-69.

Conclusion

Applicants do not acquiesce to the characterizations of the art. For brevity and to advance prosecution, however, Applicants have not addressed all characterizations of the art, but reserve the right to do so in further prosecution of this or a subsequent application.


Applicant : Gregg L. Shetty
Serial No. : 10/688,668
Filed : October 17, 2003
Page : 21 of 21

Attorney's Docket No.: P-US-TN-3305

Please apply any charges or credits to deposit account 02-2548.

Respectfully submitted,

Date: Nov. 20, 2007



Scott B. Markow
Reg. No. 46,899

The Black & Decker Corporation
701 E. Joppa Road – TW199
Towson, MD 21286
Telephone No.: (410) 716-3606
Facsimile No.: (410) 716-2610